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EXPERIMENTAL INVESTIGATIONS IN TELEPATHIC HALLUCINATIONS.

VIII.

THE chief conclusions from the evidence presented in the last number of *The Monist*, stated as immediate inferences from the figures, are :

1. So-called telepathic hallucinations actually exist, and moreover they manifest themselves on a large scale, at any rate among our subjects, in ways contrary to the common belief in the matter.

2. They appeal in several sensorial forms: most numerous in the sense of sight, and next in that of hearing. Telepathic hallucinations are also found in the senses of touch and of smell, a fact which, so far as we know, has not been sufficiently emphasised before.

3. There is a striking inconsistency between the firm belief in the coincidence of telepathic hallucinations and the reality of the fact determined by the experimenter; thus, to cite but a single case, out of 1011 cases examined into, of which 981 were accompanied by a complete belief in the reality of the fact, we traced up 943 errors and found but 40 exact coincidences. The same relation is shown by our other figures.

4. The proportion of genuine cases per hundred is exceedingly small, and notably so if it is referred to the total number of cases examined; thus we have 5.47 per cent. if we take account only of those cases which showed some exact coincidence confirmed, and 2.61 per cent. in the contrary case, or further, only 2.25 per cent. the total number of cases, 1374.

5. Women as well as men experience these hallucinatory sen-

sations, although women are somewhat more subject to them than men, but the amount of education counts for a good deal in this matter. Higher education seems to free the mind from credulity, and renders it somewhat immune to telepathy. The existence of telepathic hallucinations is certainly proportioned to the sentimentality and the orthodoxy of the subject. A believer is more liable to such states of mind than a rationalist, a fantastic imagination than a logical mind. In order to better prove this statement we must emphasise the observations made upon the belief in telepathy in various circles. In France, as well as in Roumania, there is always, according to my observations at least, a close relation between training, environment, education and social or other beliefs. For instance, among peasants, religious as they are in almost all countries, belief in telepathy is a positive, indisputable fact; it is the same among priests, nuns and the more or less educated orthodox believers. This belief decreases considerably in artisan circles that possess some degree of information about social, intellectual and religious life. Among the learned classes faith becomes almost null and is replaced by a sort of rational skepticism or by a profuse argumentation, which in some cases leads to the conclusion that such facts are possible, and then a certain credence is given to sensorial hallucinations, and in other cases leads to more or less logical conclusions that would force the unknown and the problems of the unknowable, according to the manner in which their solution is regarded. The conclusions are mostly involved, being mixed up with occultism, spiritualism, and transcendental dogmatism besides. Here are some figures that finely illustrate our assertions:

	PERCENTAGE OF PROB- ABILITY CREDITED TO TELEPATHY.	
Peasants lacking education entirely.....	90	per cent.
Priests having religious instruction.....	98	"
Priests having mediocre or higher education (20 sub- jects).....	68	"
Artisans and employees of moderate education.....	25½	"
University men; publicists; writers.....	9.5	"

Each report is based upon the determinations made with 50 subjects, all in Roumania. The peasant is religious and credulous,

and telepathy according to his intellectual conceptions is perfectly logical; while the educated man, here as elsewhere, is rationally skeptical, which does him credit.

In France we have likewise made observations in various environments; our reports refer to 30 cases of each class, and we regret not to have been able to make observations in religious circles. Nevertheless, from certain conversations and observations that we have gathered the fact is brought out clearly, that the priest and the educated orthodox man believes in everything that pertains to the miraculous. I should even go so far as to say that a miracle does not appear phantasmagoric to them, as it does to us, and that according to their logic it is almost a biological fact, if not more. Among the peasants of the neighborhood of Paris and Royon the percentage of probability was 78 per cent.; it was 12 per cent. among the artisans, and strange to say, here the intellectual people, university men, publicists, writers, gave the hallucinations far more credence than elsewhere, and much more than did the artisans; the average probability indicated by this class is 36 per cent. Is this perhaps due to the occult, magic, mystical sciences of all sects that engross the finest intellects in Paris? I am really not able to decide. The fact seems to me certain, however, and the more so since the circles devoted to the more or less scientific cult of the marvellous are more numerous in Paris than elsewhere, and they receive more attention from the intellectual world here than in a quietistic country of the East.

It is also to be observed that the age of the subject counts for something in the credence given to telepathic hallucinations and to their existence. A young man rarely has such hallucinations, while a mother, a father, in other words an older person, is more likely to experience them and to believe in them. It seems to me an established fact; I have met it in all classes of society, and it would seem that to feel this kind of sensitiveness to telepathy, one must have had more knowledge of life, deeper, dearer, more enduring memories, sorrows and experiences, than fall to the lot of young people who are still charmed with dreams, with the ideal, and with life that has scarcely begun to tremble upon their lips. Life spreads

out into infinity before them, it is still the inspiring source of beauty, of desires ; it still enfolds the mysterious future, and the real sorrows of life have not tortured their brains which are like flowery fields. For those that are older the mysterious makes a stronger impression upon their life ; the future is less gloomy, and the eternal, "What do I know ?" or "What am I ?" becomes categoric. One can know, and the need is felt of gathering up as we go, the crumbs of our lost life, of our scattered ego. Attention is turned toward the sources of the affectionate emotions, and the mind more readily yields to the hallucinations of the senses, being the prey of pain, grief and unsatisfied hopes. This is the psychological explanation that we give for the influence of age and the belief of older persons in telepathic hallucinations.

IX.

Before concluding and before formulating our hypothesis upon the nature of telepathic sensorial hallucinations we ought to discuss and criticise the interesting observations of the English investigation of telepathy. We have already shown in the course of our exposition the dominating idea of our work, and a fuller collection of evidence would in our opinion be useless. The most important criticism that could be made, and that has already been made, of the English investigation is the implicit confidence given to unknown subjects, in spite of the apparent reserve repeatedly expressed by Messrs. Gurney, Myers and Padmore. We shall let these authors speak for themselves, quoting their own words, although it is true that they write in their introduction (p. 13). "In order that the facts which we have collected may be convincing, it is clear that they ought for the most part to be gathered by ourselves." And further on : "Even if there had existed sufficient well-established testimony to excuse us from collecting any more, it would still have been advisable for us to see the persons that were the subjects of these strange hallucinations, and to talk and correspond with them. That would be the only way to make sure of the good faith of the witnesses." This is the method that I myself have followed and I am sure that it will be regarded as the best

one; my English contemporaries concede this themselves. I am willing to compare my results with theirs, after having learned from their own admission how much confidence and how little analysis they bestowed upon their subjects.

At the bottom of the same page (13) we read: "Of course we are not safeguarded from involuntary errors of observation and of memory, but yet it should not be assumed that our correspondents in general have less precise and less accurate faculties than the average of men. Our exact and precise method has relieved us of all the sentimental and ill-balanced spirits that love the mysterious for its own sake. On the contrary, we have met with very frank responses from a large number of people who have felt with good reason that the obscurity with which these events are surrounded makes it still more necessary to report them with exactness and soberness. The simple and precise style of most of our correspondents, the honored names borne by some of them, may give the readers something of that confidence which our spirits have received from a closer contact with the facts."

Further on, p. 22, in the second chapter, the authors express themselves as follows: "It is the accumulation of experiences that should establish certitude. We do not base the proof of the exactitude of our experiences upon the honesty and the intelligence of each individual experimenter, but rather upon the fact that it is inconceivable that a large number of reputedly intelligent and honest persons should all permit themselves to be tempted into fraud, or should all have been deceived."

"We have a large number of testimonies first-hand," write the authors, p. 54, chapter IV, "coming from intelligent and educated people whose common sense has never been questioned. The majority were not disposed in advance to admit the reality of the phenomena. In many cases their accounts did not seem to them to contain anything of special interest. While unable to deny the facts of which they had been witnesses, some of them even professed an entire skepticism regarding this class of phenomena. The facts themselves do not involve any particular belief. There is in this a striking contrast between telepathy and the apparitions of

the dead. The belief in the survival of the dead beyond the grave is widespread among the people, and no less so that of their appearance to their relatives and friends. But the same cannot be said of apparitions at the moment of death. Without any doubt we find instances of this in works of history and tales of travel; but while these examples are numerous, they are isolated, and even those who speak of them mention them as rare marvels; they do not introduce them as evidence in support of some general belief. This notion is even so new that on most occasions apparitions of this sort have been regarded by those that saw them as being apparitions of those already dead."

All these considerations and others still more numerous lead the authors to believe "that they prove, supposing that we interpret them correctly, that a spirit can act upon another spirit or receive impressions from it by other means than those of the senses."¹ In such a conclusion as this ended the investigation of the London Society for Psychical Sciences, conducted since 1882 by Gurney and Myers. We remember that the English authors had invited the public to respond regarding such facts as they might know relative to the apparition of persons at the point of death or after death.²

One fact is certain in the investigations of Messrs. Gurney, Myers and Podmore, and this is, that they have too great confidence in their subjects, at least for the majority of anonymous correspondents, and accept as more or less disputable truths, but yet as truths, all the lucubrations of the numerous correspondents who reply to their inquiry. It could not have been otherwise, considering that these documents by this very title constituted for them a body of truly scientific material.

In our opinion, there is to be found in this very fact a large and striking source of error, which explains, moreover, the conclusive disagreement of our investigations. In the preceding pages I have presented in outline my doubts regarding the mental condi-

¹ P. 17, *op. cit.*

² A first glimpse of the "directory idea" of this sort of study had appeared before this in the *Fortnightly Review*, May, 1883.

tion of the subjects, and I shall endeavor to summarise them thus : It is not possible to repeat such simple notions, which seldom take deep root in our thought !

My personal investigations as well as those of the Society for Psychical Research show clearly that there was almost always, with very rare exceptions : (1) a common intellectual ground between the two persons who constituted the subject and the object of the telepathic hallucination. They possessed—and my cases furnished a striking proof of this—common and intimate intellectual relations, common and dear memories the product of many years ; they had had some common love, or friendly sentiment, or kinship, or profound sympathy of an intellectual or more notably emotional nature. A parent experienced the telepathic hallucination regarding his son, his wife, a friend, etc., a woman has an hallucination regarding her fiancé, her father, her grandmother, etc. And the more the person was loved, esteemed, and cherished, and the more he counted upon an established affection, the more frequently did the telepathic hallucination concern him, at least in our experience.

2. The second fact that presents itself is, that the person who constituted the object of the hallucination was always suggested to the mind of the subject as in agony, at the moment of yielding up his breath, or in some cruel and atrocious physical or moral suffering which approximated that of the death-agony.¹ These two facts prove in our opinion that the foundation of telepathic hallucinations is nothing but our psychic life with its complex mechanism and its delicate and inscrutable associations.

In fine, we have to do with a special mental state, a state of profound emotion, a psychic condition which thrills and revives our whole being, for we must not forget that the hallucinations sometimes involved friendships and relations begun in childhood, the period in which memories are fixed forever. We never forget our mother, and the tales told us by grandmother and grandaunt while gazing at the moon, where sleep Pierrot and Columbine of the leg-

¹ We might have given here more averages and additional tables to illustrate our conclusions, but we spare the reader, the more willingly because the extent of this article has already greatly surpassed the ordinary limits of a memoir.

end, and where goodman Noël has his palace, cut in our minds furrows that last for life.

The psychic condition is therefore more intimate than any other whatever, being nothing else than the fabric of our affectional and emotive supports, in fact, ourselves. This special condition is strengthened by another no less peculiar, that of the dying man ; and whatever Messrs. Gurney, Myers and Podmore may say of it, to the mass of people a dying man is almost a dead man ; it is the most emotional of all states, more so even than death itself. Moreover, there are legends and beliefs and a whole literature of marvels which have extensively popularised in almost every corner of the world the idea of the soul's independence of the body, and have described in detail the mysterious voyage of the soul of a dying man to the land of his birth and to the souls among which he had formerly found repose, friendship, love, or some moments of happiness. The Christian religion, with its admirable philosophical conceptions, has contributed extensively, in my opinion, to the stress laid upon this ethereal voyage of the soul. Both in Roumania and in France, in the course of experiments which I conducted on the psychic condition of those about to die, I found this belief, the existence of this idea of the voyage of the soul of the dying man to his native land, in surroundings which were very far from being in the current of intellectual investigations concerning psycho-telepathy. The death agony, the coma of the dying, is often an indication that the soul is going away, is mournfully setting out towards its kinfolk, to give them the final notice of its departure for the distant land of dreams and ideals, the "other side" of the thinker and the believer. The idea exists, then, and even in the state of a belief, although without the popularity of the other phenomenon, the telepathy of the dying ; this is one of the reasons why the hallucinations of this category are much less numerous than in other lines.¹

These general considerations lead us to believe that the information given by subjects under the influence of this point of view

¹ We shall treat the telepathy of the dead on another occasion.

cannot furnish a scientific documentation unless one has been able to verify it himself and at first hand.

The mental state suggested by such situations, as I have been able to examine it as a personal witness and to follow up the genesis and the evolution of a telepathic hallucination, is an inexhaustible source of errors. The figures and the tables which I have shown and interpreted above leave no room for doubt on this point. Beside these facts, which are of a very special kind, psychic life itself is far from admitting the rigorous tests and the synthesis that are commonly ascribed to it. There are different psychic polarisations every hour, and even every minute, and under the influence of the multitudinous conditions of social life or of conscious or sub-conscious psychic life the attention usually has the stamp of a dream. Those who have studied dreams will, I hope, agree with me in thinking that there is a perfect resemblance between the logic and the association of a dream and that of the intellectual life when unoccupied, free, vagabond, distraught, or pensive. In these circumstances, then can we count upon affirmations of a past fact to which more or less importance is ascribed, a fact reconstructed perhaps from memories mostly false? Systematic investigations of the localisation of memories and the researches into telepathic hallucinations which we are here giving in résumé have shown us in a manner almost categorical that oblivion causes serious havoc with the precision of facts. False memories value facts of the imagination, and the suggestion of the matter immediately in hand makes new associations, which by virtue of analysis and attention fix the mind of the subject upon conspicuous features of his life, which he associates together consciously or subconsciously in his own fashion. Errors become still more considerable when we are dealing with a miraculous fact, with an event that involves the supernatural, death, mystery; years become days, and the actual inconsistency comes to be regarded as a perfect accord. I was very close to my subject, and even a very choice subject, such as a university-trained Frenchman, a publicist and writer of talent, whom I could observe very near at hand; and I established the fact that he very easily became involved in his dates. Mystery, as well as

the supernatural when actualised, intoxicates and poisons the organism, causing in our opinion a profound amnesia accompanied by an exaggerated self-esteem and the almost complete absence of any new synthesis. The more or less remote realisation of a fact which had never perhaps done more than dance lightly through one's mind produces what I shall call a psychic paralysis, a sort of intellectual blockade which leads us into revery, into exaltation or depression as the case may be.

These errors increase when they are accompanied by beliefs and false opinions which feed day by day the impressions seen or dreamed. Under these circumstances they become almost fixed beliefs and accomplished facts.

And then, *false cognitions*!¹ They swarm in our minds! How then disentangle the reality from the point of view of illusion and of belief? A task of sufficient difficulty when one is master of his subject; how shall one accomplish it when he receives the replies in writing, and from anonymous correspondents at that, who are expected to remember whatever hallucinations they have experienced during the past ten years?

We are, therefore, very far from feeling the same confidence which Messrs. Gurney, Myers, and Padmore accord to their subjects, and our reasons for our position are very serious.

In recalling a fact from memory one is sure, or almost sure, with very few exceptions, even if the event took place but a few hours before, to find some errors. What then of the chances of ten years! How many memories forgotten! What a confusion of sub-consciousness, of precision, of lies, of illusions and of feelings! It will be said, on the other hand, that the phenomenon in question touched a vital fact in the psychic life of the subject. That is true; here we agree: there is in this fact a certain presumption for the evidence, but the sources of error are no less great when a vital feeling is involved which is contained within a vague environment, the details of which are sometimes artistically confused in accordance with whatever caprices have been stirred or provoked afterwards.

¹ On this subject consult the well-planned work of M. Bernard Leroy. Paris: Alcan.

Letters and other documents of this sort do not signify much, for it is necessary to know the mentality of the authors and the psychological conditions when they took up their pens to write or to note down in their studies this or that impression. My information as to the mentality of my subjects and especially the means of testing them have, I confess, given me much trouble, and I am very far from thinking that I have discovered all the intellectual factors that are involved. And I doubt greatly the value of the information given by a letter which 'narrates phenomena that took place over a period of ten years and emanating from a mind interested in the subject by an inquiry merely picked up in the reading of a journal. There are still other little susceptibilities that might be involved; man never fails to affirm his own existence, and especially the continuity of his identity, as Spinoza observed. One replies to a question out of curiosity, custom, or desire to accentuate a personal belief, self-love, a hallucination, or the like, for we must never forget that there is always a sleeping animal at the bottom of every human soul!

The English authors maintain that the assertions of an illustrious mind moreover have an especial scientific value. This utterance renders a digression necessary. The statement is but partially true. For why, and by what reasoning, attribute to a learned and illustrious person the gift of self-analysis, and especially good scientific and psychological sense, a gift rare enough even among the choicest minds? Mr. X. may be a brave general, an admirable technician, but totally lacking the power of self-analysis, of knowing his own condition of soul at any given moment, or of recognising the sources of his thought. The same is true of a mathematician, a physician, a poet, a novelist. It must not be forgotten that among the finest minds, particularly among literary people, ignorance of psychic life is most characteristic, and credence is given to any supposed fact whatsoever, as for instance, to a dream or a commonplace saying that is in everybody's mouth. This is the way I explain how it happens that occultism, magic, spiritualism, and all these vague sciences have full sweep in this world of dreamers, where, although the talent and sometimes the gift for

analysis are not lacking, yet they are directed toward other aims, such as: subjects for novels, hair perfumes, rhymed quatrains, etc.

A sad occurrence, or especially the thought of death, may produce amnesia, and, facilitating false cognitions, helps to circumscribe the mental life of the subject with a vicious circle. The thought of death haunts us frequently, especially with increasing age, and in course of time it becomes the *Leitmotiv* to which any sensation whatsoever adheres, and it is aroused by the slightest suggestion. Social environment furnishes the motives by means of its various agencies: publicity, social life, conversation, etc., each of which arouses the individual life of the subject, starting the automatic, vicious circle of thought and with it the notion of misfortune or of death. This is intended to show the necessity of taking into account the ideas among which the subject lives, the psychic, hygienic and other conditions that surround him, and likewise those that surround the absent person, the object of the hallucination. The notion of death haunts a mother that knows her child, or a relative, or a beloved friend to be in a village where an epidemic prevails. This same thought daily conjures up telepathic hallucinations in the mind of a woman whose betrothed is away at war, or during a storm, when she knows that he is in a fishing-boat upon the tempestuous sea. The condition is of vital importance and should be taken into account from the start. Our observations on this point are categorical, and they prove that in 97 per cent. of the cases the ideation of the environment was the source, or rather one of the principal factors, that suggested and produced the telepathic hallucination; in the other 3 per cent. of the cases the family and social ideation of the environment of the subjects could not be as carefully examined as in the other cases.

The example of coincident telepathy mentioned a few pages back, taken at random among many, is a typical case, showing the importance of knowing the mental condition of the subject, and of a previous, intimate acquaintance—or supposably such—with the object of the hallucination. Mme. N. loved her husband; a sweet and calm life of more than thirty years had glided by; she knew her husband's nature and had repeatedly praised his courage.

He had met with quite a number of accidents during his life, and had always got out of them very nicely. He had jumped several times from his carriage when the horses had run away. So much for his character. At the same time she knew the horses,—nervous beasts that took fright at any noise. And thirdly, she knew that the coachman was a drunkard, and that he had been in the habit ever since he entered their service of taking a drop too much of the town alcohol. The weather was bad; inundations were threatening, and Madame N.'s husband was rather old, already entering his seventy-second year. Several different times Madame N. had counseled her husband to prudence, and especially not to mount a horse, nor to expose himself to danger in any way. Before leaving he had greeted her with a smile, telling her not to worry; that other accidents had happened along his way before but that he had always come out unscathed. And besides, business was urgent, and she must yield to the inevitable. Madame N. remaining behind, busied herself with her household duties but was by no means reassured; the weather, and especially her special mental condition, contributed largely to render her more melancholy. However, the hallucination took place before the fact occurred, and the psychological explanation is very plausible. Having urged Madame N. to analyse herself, she had confessed to me that she believed that her husband would return before breakfast, as was his general custom. Her sub-consciousness was at work, however, and aided by the somatic and automatic intellectual life of the subject concerned forced itself upon the attention as a credible hallucination, startling us by its spontaneity, although in fact it was the expansion of a sub-conscious ideation, which had escaped the attention of Madame N., as is the case with all persons who experience credible hallucinations. However, this variety has been less numerous. As for the others, our figures have shown that they exist only in the imagination of the subjects and that they are based on no reality whatever.

XI.

Unfortunately it is not sufficient to indicate the name of an author, his address, his nationality, his titles, in order to have a

scientific documentation of a fact, and we believe that our arguments have sufficed to call the attention of the reader to the slight guaranty of veracity offered by such investigations. Furthermore, let us not neglect to criticise these investigations as they stand. They entertain, they deceive, they secure titles for those who conduct them, and with rare exceptions they deserve to attract attention, and then they should be restricted to a small and local number of subjects. Wholesale facts are more or less striking, it is true ; but there are so many extraneous matters involved that unfit them for any real use, and they require then so much careful examination and extensive individual study.

We find this same condition of easy credulity in the evidence collected by another scientist, M. Camille Flammarion, who in reporting an investigation conducted by himself on the telepathic manifestations of those about to die writes : "The striking thing in all these accounts is the sincerity, the conscientiousness, the frankness, the delicacy of the narrators, who are so careful to say only what they know and just as they know it, neither adding nor withholding anything. Every one is the servant of the truth !"

Charming words, and such solemn serenity !¹ M. Camille Flammarion demonstrates that he has a tender heart, that the man who thus reasons is a man of sentiment, but who forgets all our abundant evidence on the psychic mentality which has been collected with incomparable perseverance throughout several decades in all the hospitals and laboratories of the world. To put such trust in the "sincerity," the "frankness," the "conscientiousness" and the "delicacy" of the subjects reporting is to confess squarely that the investigation has been conducted like the others we have been criticising. For it is not sufficient to be a worthy man and an honest in order to deserve credence in the analysis which anyone makes of a certain mental state, x , x' , or x'' ; honesty has nothing to do with the matter. Unconsciously one sins by lack of ability to analyse, to observe adequately, to concentrate the attention, etc. ; one fails to fix his impressions well, and he fails still worse in recalling them.

¹ Camille Flammarion. *Des Manifestations Télépathiques des Mourants*. Nouvelle Revue, CXX. 1889. P. 456.

M. Camille Flammarion had launched his investigation into the world by the channel of the *Annales*, by that of the *Petit Marseillais*, and of the *Revue des Revues*. In the *Annales* it appeared in the issue of March 26th, 1899, and in the other publications the months of June and July. It was formulated as follows :

“Will our readers have the kindness to send us a simple postal card replying with Yes, or No to the following questions :

“1. Did you ever experience while awake the distinct impression of seeing a human being, or of hearing him, or of being touched by him, without being able to refer this impression to any known cause?

“2. Did this impression coincide with a case of death?”

M. C. Flammarion received a large number of replies more or less detailed, of which a large number were unworthy to be discussed as evidence, and he retained 782 of the affirmative answers as important; there were altogether 4280 replies, 2456 being negative and 1842 affirmative.

Reviewing this investigation we shall permit ourselves to criticise it for the suggestive and defective way in which the questions were formulated, and secondly because the author has made a selection of his evidence. From the scientific point of view negative answers are no less valuable than affirmative answers. And in fact, what important reply could the readers of M. C. Flammarion's questions make to his demand of Yes or No? This recording of negations and affirmations could not at the best do more than give an idea of a vague report, at least in our opinion, of the public opinion of educated people.

We have a particularly high esteem for the author of “*L'inconnu*,” and as a devoted reader we owe him a great debt, but he must permit me to criticise him as a psychologist. In psychology figures that are not accompanied by data regarding the mental state and the psychologic conditions under which the figures were made are subject to several criticisms, and especially so from the scientific point of view.

Let us note in passing the very just remark of M. Flammarion, that “a great number of these facts—in telepathic hallucinations—

are subjective, take place within the brain of the witnesses, even though determined by some exterior cause. A great number also are hallucinations pure and simple. What they teach us is, that there are still a great many things we do not know; that there are in Nature unknown forces which are interesting to study."¹ And I would add on my own account, and I believe that M. Camille Flammarion will agree with me, that there are still more unknown forces and phenomena scarcely studied in the brain of man, in our psychic life.

At the Congress of Psychology in Munich several communications were presented on the subject of telepathic hallucinations, together with discussions and communications as interesting as they were ingenious, in which the participants were: Dr. Bager-Sjögren of Upsala, Mr. and Mrs. Sidgwick of Cambridge, authors of a rich and remarkable mass of evidence on telepathic phenomena, Dr. W. V. Dechterew of St. Petersburg, Edmund Parish of Munich, and M. Charles Richet of Paris. The conclusion seemed to be that "it is very probable that there are no credible hallucinations." Knowing only the abstracts of the communications presented to the Congress I cannot dwell upon their methods nor discuss their evidence. However, our remarks in the present paper will apply to them in part also and to their conclusions which are but a continuation of the remarkable observations in the investigation of Messrs. Gurney, Myers and Podmore.

XII.

After having interpreted our evidence, a new question arises: Can we conclude that telepathic hallucinations exist as well-defined psychic phenomena, or are they only sensorial hallucinations based upon no positive, actual data, and occurring only by chance? The explanation of the phenomena depends, of course, upon which of these two hypotheses is accepted.

Our evidence proves, first of all, that the coincidences seem fortuitous rather than dictated by any biological or physico-psychic

¹The memoir quoted, p. 458.

laws, and secondly that they are more numerous than has been claimed. The English authors conducting the investigation of telepathic hallucinations resorted to the calculus of probabilities in order to show that the results obtained belong neither to the domain of chance nor to that of fortuitous coincidence. In fact their mathematical calculations based upon the average of mortality, and upon the probability that a person should have experienced a hallucination during the period of 12 hours coinciding with the death of a friend or relatives etc., show according to their opinion and according to their algebraic ratios, that if hallucinations were due merely to chance, there would necessarily "take place in a group of 300,000 persons, in 12 years, 182,500 hallucinations, that is to say that three persons out of five would have experienced a hallucination during that space of time." But from their investigation the contrary is shown; telepathic hallucinations are much less frequent, and exceed the probability expressed in more or less imaginary figures.¹

Statistics and mathematical arguments deceive rather than instruct the eye. Setting aside the figures, and the probabilities more or less reduced to a common fact, as well as special mathematical reasoning, the calculation is not strictly exact, owing to the absence of the chief statistical data. For, in order to calculate such a probability mathematically, it would be necessary to have numerical data concerning the probability of the person's death or illness, numerical data concerning the state of his health, concerning his environment, concerning the mortality of the country and town in which he was living, as well as such data concerning the person experiencing the hallucination, at the time of the observation, in other words, data concerning the probability of mortality, eliminating as far as possible the tabulation and vague generalisation of statistics as commonly made. Not being able to obtain these data about my subjects, I have not dallied with this little mathematical calculation for any class of my subjects. I simply insist on the value of these manifold factors, which are already beginning to receive the atten-

¹ On this subject see Chapt. X. on the "Theory of Fortuitous Coincidences."

tion of statisticians; mortality varies with the social class, with age, and with social conditions. The probability changes according as the person lives in town or in the country; as he is 70 years or 20; according as he is sound or feeble. Only when such statistics and still others are made, can the psychologists make use of the dates, not forgetting however to take into account and to weigh well the personal coefficient of the statistician, of the observe, and of the observed. The calculus of probabilities would still be superfluous, for the credibility of these 48 cases of coincidence out of 1325 cases investigated and connected with 34 persons, show sufficiently that they are out of the bounds of probability.¹ However, what would be the value of this probability when it is in flagrant contradiction with the most elementary biological notions? In an experiment where only 2.5 per cent. or even 3 per cent., or again 0.3 per cent., or no result whatever was found, probability does not exist scientifically, so to speak. Why not hold to this simple confirmation of scientific common sense and why search for special reasons which confuse the results by introducing into the calculation a considerable number of unknown quantities? I have studied long on the part due to the calculus of probabilities and to these scientific data, and despite the vital problems involved, and despite the value of these discussions of mathematical philosophy, I incline to believe with my illustrious master, M. Bertrand, who attributed to it less value than to the data of simple common sense. Apparatus is full of temptations, and in our days the psychologists of the new school intoxicate themselves with a certain number of mathematical formulæ instead of reasoning simply, and the sight of these probabilities, derived no one knows very well whence nor in what manner, hypnotises them to such a degree that they treat our mental acts like numerical data, and the development of our wretched psychic analyses like precise measurements, like millimeters read by the

¹ Roumania has a very large percentage of mortality. The most recent statistics published, those of 1894, show that in 1893 there was a mortality of 31.5 deaths for each 1000 inhabitants, while in England there were but 16.6 deaths per 1000. See *Mouvement de la population de la Roumanie en 1894*, par Leonida Colescu, 1 Vol., pp. 95, iv. Bucharest, 1900.

vernier. Speaking from the point of view of biology and reckoning with these multitudinous conditions of a psychical, physical or statistical nature which we have treated in the preceding pages, it seems to me a little premature to attempt to apply such a learned mathematical process, which, moreover, has yet to be formulated precisely and scientifically, to such vague and intangible data.

Telepathic hallucinations, judging from their considerable number, from the degree of their illusory subjectivity, and from the small proportion of credible cases, do not seem to hold rank as well-defined psycho-mechanical phenomena acting independently of the sensorial agent. We do not consider this proportion of credible cases as a matter of chance; it is a fortuitous coincidence which in our opinion is easily explained.

Comparison has been made, and properly, between telepathic phenomena and the phenomena of mental suggestion and of the transmission of thought at a distance. The fine investigations of M. Richet, which I have continued on a large scale, present among others most valuable evidence. Hallucinations are purely subjective phenomena depending on ideation directed consciously or unconsciously by any association whatever of automatic or voluntary ideas. All the facts discovered in telepathy have taken place under very special, yet very definite, conditions. The persons concerned are always absent and far removed one from the other; the conditions are always emotional and the persons are intimate acquaintances, relatives, friends, lovers, people who have lived a long time together, and who know each other thoroughly. Telepathy always concerns serious misfortunes, mortal agony, the state of approaching death, and the situation recalls the person in his suffering with his familiar gestures—our investigations furnish a striking proof of this—with almost the same garb, the same accent, the same physiognomy by which the person had been known despite the time and space separating the persons and the difference of conditions from the reality, whatever it might be. Our observations have furnished us definite evidence on this point and notably have shown a conclusive discrepancy between the actual physical conditions of the subjects in the credible cases and the conditions seen in the

hallucination. In the English investigation, despite the paucity and inaccuracy of the tested evidence, we may find this same predominant shade of subjectivity in the persons who experienced the telepathic hallucinations. They have a personal stamp and seem to be the exclusive product of the thought of the subjects.

Some of these cases of fortuitous coincidence can in my opinion be explained by what I shall call "pre-established intellectual harmony," to borrow the terminology of the philosophy of Euler and Leibnitz on the relation of the soul with God. In practical life our mental states harmonise in conformity with our impressions, our instincts and other intellectual or bodily springs of action; this harmony is generally controlled by emotion, by the efficient energy, the fundamental and primitive substance of our being. From the age when reason begins to formulate any sort of psychic synthesis our spirit is always trying to be in harmony with other minds in conformity with our desires, our emotions and our intellectual motives. Puberty comes later with its almost morbid expansion of the desire for harmonisation, and finally adult age arranges and models our sympathies in accordance with already established psychic conditions.

XIII.

At the bottom of each one of us there is an unsatisfied capacity for sympathy, a melancholy tenderness, which persists despite our learned reasoning, despite our psychologic analyses conducted with marvellous erudition. Beside this emotional foundation slumbers in our soul so to speak a dying being, a mystic. This is the very essence of our being! Transmitted by heredity this casket of mystic sentiments, as it were an elemental state of our consciousness, disturbs us from the moment when we have succeeded in establishing a more logical relation between the vital "ego" and the mysterious "non-ego." The "non-ego" haunts us, disturbs us and at the same time unconsciously or subconsciously this refrain comes like a dominant motive into our thought, now tender, now melancholy, and now categorical and cruel. It is the patrimony of the superstitions of the ancients, the synthesis of their fears, their mysteries,

their ignorance and their terrors. For every belief has something more at bottom than "the infantile spirit of the savage," despite the opinion of Tylor, Spencer, and Sir John Lubbock; it rests upon deeper psychological facts. A belief is the elementary form of a whole system of metaphysico-biologic dogmatism. Our hair grows gray, age separates us from our years of indifference, the eternal "What am I?" "What do I know?" and "What is to become of me?" press upon our spirits with ever-growing persistence. Here we have the whole past of humanity speaking within us!

This state of mind assists largely in directing our thought toward that condition of harmony, toward those ties of sympathy which by their charm, their confidence and their tenderness will put more of reliability, of self-denial and of trust into our human relations. To be solitary is the mark of a genius; it is the possibility of thinking, of struggling against the "barbarians" of every sort who invade the sanctuary of our thought. But how many of us, even among those who are thinkers, will be able to endure that state of soul? Exceedingly few. We seek for affections, and we find them; we retain them as part of a cherished patrimony of our past, of our remembrances; we never cease to think of them, and most of all when we separate one from another.

The purely emotional or intellectual affections, as the result especially of a life spent together by the persons concerned, would finally establish what I shall call the *psychic parallelism* which consists in a sort of pre-established harmony. There is produced an *intellectual mimetism*, quite analogous to expressional mimetism. In this connexion I am able to cite certain observations which I have been making for a long time, and which have demonstrated to me the delicate affinity that may exist between two parallel psychic lives. Lovers are a typical example, likewise mother and child; knowing each other well, each knows even at a distance exactly what the life of the other is; they can conjecture each other's emotions and annoyances, and in the long run they can comprehend each other's intellectual state, especially in what we shall call critical situations. Under the influence of similar conditions different psychic lives react about in the same way, and especially

after a long life spent together two persons can come very near to knowing each other. The mental life constitutes a vicious circle, and a time is apt to arrive when our intelligence is closed to all suggestions from without; we are then always the same, almost identically the same, and easily identified in our acts and thoughts. With oncoming age a stereotyped mental form is established, and the manner in which our mind retires within itself begets of itself a sort of petrification of the immediate surroundings in which one formerly lived, rather than of those in which he is living in his later years. Our means of intellectual communication become exhausted very quickly, and conversation often falls into ridiculous absurdities, betraying in most cases only a lessened mental power which remains unchanged and is extremely silly because of its frequent repetitions.

People often separate under the influence of strong emotions; the idea of parting and of absence makes them think of death and of sorrows; these thoughts are an endless source of melancholy. Who knows whether the beloved one will return, who knows whether or no he is going away for all time? Separation is often for a long time, if not forever, and the emotion is proportionate to the distance that separates those that love. It is necessary to take into consideration also the age and the mental and physical condition of the absent one and of the one remaining at home, in order to understand the mental processes of those that are separated. They may remain for months or even for years under the influence of that parting, and emotion is fed by the beliefs of the subject and the other influences of the environment in respect to ideation and all other suggestions. If the person is more impressionable, the emotional state is still more sensitive and still further disturbs the personality.

Such being the case, a fortuitous coincidence is very likely to occur in which the subject and the object of the hallucination experience this so-called *telæsthesia*. The unknown is always perceptible in the hypnotic state, and we are all like the sailors' wives that stand for hours upon the shore, searching the infinite, their eyes fixed upon the horizon, in the belief that they may be able to

discern the outlines of a ship. A flock of gulls is taken for the sails of a boat, as at other times we try to guess the meaning of that bluish haze floating upon the horizon. Thus a person has a telepathic hallucination every day,—thinks the absent one speaks, hears him, sees him, smells him, or is touched by him. Generally disillusion disconcerts us; the wind was whistling outside; the echo of his voice resounded in our thought as a memory; or a tactile sensation became vaguely localised in some part of the body under the impulse of a plasmic image. At times, in the proportion of 2 to 100, it happens that we hit it right; the news we had of the absent one, the knowledge of his surroundings, his precarious health, his psychic life, etc., had prepared us beforehand to have a mental hallucination corresponding to his own. Knowing his character, his psychic modality, his doubts, his desires, his fears, and his mental sufferings, we can very closely estimate his mode of life. Our subconsciousness, with its slow, imperceptible processes, had prepared the way for this state of mind, of which otherwise we know nothing, and we are surprised when a sensorial image spontaneously presents itself to our thought, or passes away quickly as a telepathic hallucination. Then we do not hunt for causes, nor for the springs of thought; we see only the coincidence, and a single one in a hundred suffices to create a legend, to warp judgments and memories, and to suggest in the ideation of the social environment of the subject the more or less credible probability of similar sensations and similar prognostications. And as death is the greatest sorrow than can come to us, we often see the absent one dying or ill, especially if the occupations and needs of life do not snatch us from such suggestions—which we classify subconsciously,—and if they do not make us forget the meaning of life, our affections, our desires, our mental suffering. The spontaneity of the fact seems surprising, indeed even miraculous, and we do not stop even for a moment to consider that we are here dealing with a slow ideation, thanks to that pre-established harmony and that psychic parallelism of which we have already spoken. I possess some conclusive evidence on this subject, and I have been able to observe personally in thirty-seven hallucinations,

as well as in the great majority of my cases, the progress of this slow, subconscious ideation. I cannot forbear to cite a personal experience. At the time of my father's death, two years ago, I had the very evening of his death the telepathic hallucination of his suffering simultaneously with Mme. V. On entering my home, Mme. V. called my attention to a peculiar odor in the room. "It is just like that at your home at B.," she said, "it smells like quince." In fact, in my country and in my home it was customary to put quinces into the bedroom and to keep them there during the entire autumn, perfuming the air with the fragrance of quinces. At this recollection I saw my father dying. The next day I received a telegram in which my mother informed me of my father's serious condition, begging me to come as quickly as possible. I was separated from my father by a three days' journey by rail. My father had in fact died toward morning, and during his last hours, all night long, he had constantly called for me. Between the moment of his death and our hallucinations there was according to my calculations a difference of seven hours. His last moments had been calm, and being a believer, he had shown a truly Christian resignation. He had had several syncopes. And what are we to conclude from this fact? In accordance with the current reasoning no other conclusion is plausible than telepathy as a telæsthetic phenomenon, and the fact might have been cited as a credible hallucination. Would this hallucination have corresponded with any of the comatic conditions at the moment of death or to the phenomenon as a whole? A difficult problem, with new conditions which the experimenter must take into account; the manner of death is so variable and the death struggle may last from several weeks to a few moments. I recently had the opportunity of testing this experimentally in investigations which I undertook regarding the "ego" of those about to die, and which I am pursuing at present.¹ I took into ac-

¹ I take this opportunity of thanking Dr. Toulouse for his great kindness in placing at my disposal his model staff of the *Asile de Ville-Juif*. There I had the opportunity, not only to pursue on the study of psychiatry, but to observe and gather a whole mass of psychological evidence, which would have been difficult, if not impossible, to get elsewhere. I tender my profound gratitude from the depths of my heart.

count experimentally from the first the value of this psychic parallelism and then the difficulty of catching the true moment, which in the opinion of adepts in telepathy would be the cause of the hallucination. The dying man calls for his son, his mother, or his family when he feels perfectly well; and his psychic condition is deeply shaken when he approaches final dissolution, and when he nevertheless retains his clearness of mind, as for instance in the case of a tuberculous patient, and gives no perceptible sign of his emotive thoughts. One may say the same thing of the somatic conditions of the genuine deliriums with their peculiar panoramic vision. The problem, therefore, is altogether different, and one cannot scientifically establish by the aid of the calculus of probabilities any quasi-mathematical correspondences. My case of telepathy can in my opinion be explained in another way. I knew that my father was weary and ill; I knew his mental state very well, and I was accustomed to follow his thought from afar. As he was seventy-three years old and ailing, I had worried about him for a long time, and at the bottom of my heart I had been expecting from day to day a word from my mother announcing that his condition had become grave. Though he had rarely been sick in his life, he had been suffering for some months from the results of a cold. I had seen him a few months before; he was feeble and our separation at the time of my departure for Paris had deeply impressed me. He wept and realised that his vigor was departing. He told me that he had a feeling that he would never see me again. All these impressions moved me profoundly and I still feel the thrill of that emotion. From time to time the letters which he wrote me were melancholy, and I recognised in his touching words the language of a dying man. He wrote me customarily twice a week. For three weeks I had received no letters from him, and I had several times experienced a hallucination that he was ill. From time to time he suffered more especially and for some while he had remained in his room upon the orders of the doctors. Preoccupied by my work and my investigations I nevertheless did not forget my father, and in my odd moments I found myself thinking of him and his illness. All my memories of childhood were as it were polarised about the state of

his health. I had never experienced a death in the family that could touch me closely; the death of my sister when I was quite a child had left with me only some vague memories. The idea that my father was going to die disturbed me, and yet I kept regarding it more and more as a reality. Here I will add that it is necessary to take many precautions in observing an hallucination concerning the critical physical or moral crises of an individual. A sick man, seriously sick, is always thinking of his family, always lingering over his memories and his affections, and there is a great probability that a fleeting thought on our part might correspond to his constant mental condition. Take the case of a patient suffering with diabetes with its many crises, a gouty person, a victim of ataxia or of some mental malady which has baffled those about him and even the physician who prescribes his remedies! In such a case the probabilities of a coincidence become still more numerous and without regard to what coincidence is probable; the automatism of psychic parallelism explains all without making it necessary to call in telepathic forces.

The last letter from my father was, as I have said, sad; some days before his death I received from him a letter written to him by a little nephew. This circumstance had troubled me much. He wrote to me by the hand of another when he had been so fond of chatting with me by letter! I suspected that the final catastrophe was at hand. It came suddenly, at the moment when I was pre-occupied by a paper that I was revising and which had for two or three days interrupted my telepathic absorption in the condition of my father. However, I had chatted frequently with Madame N. regarding my father, and several times I had expressed to her my fears; or rather, one day I had expressed my impatience at receiving no letter from my father; I had even had a vague hallucination of his soft blue eyes. The evening that he died, and perhaps at the very moment when he was yielding up his soul and calling upon me in words of tenderness, I had an hallucination of his condition. I saw him just as I had left him, with his usual expression and his motions, and he seemed much changed. One of his ardent desires expressed during his life was to have me near him at the

moment of his death, and as he died he expressed his regret at my absence. . . The spontaneity of the hallucination had surprised me a little, and the mysterious background of night always gives a chaotic nimbus to our thoughts, our griefs, and to our ideas, especially our sad ideas. Upon analysing myself, trying to fathom my thought I had discovered this slow ideation which I was able to identify amply. The mysterious is in the main only the foggy expression of a perfectly simple conception. I have had the opportunity of tracing out trains of ideation with documentary support in the great majority of cases, and the conviction has established itself within me that there was in none of them a case of telepathy, but only of peculiar subjective conditions.

In brief, our observations and our evidence lead us to conclude that telepathic hallucinations do not exist independently as well defined phenomena, and rest upon no established mental facts. They are not at all phenomena of *telæsthesia*, and they exist more frequently than is generally believed, but are based upon peculiar mental states. The number of credible cases is extremely small and very far from reaching the rank of any sort of biological fact. Nevertheless, the credible cases are not all due to chance; there are many among them, even the great majority of these credible cases, those that can be explained easily on the basis of a sort of "pre-established intellectual harmony," that is to say, can be explained psychologically.

We do not claim to have solved a problem so complex as that with which we are dealing; but it seems to us that there is some truth in our evidence and our arguments. Why inquire even whether telepathic hallucinations exist in a given proportion or seek out the supersensible causes and the explanation in phenomena that border upon the marvellous? Nothing is impossible in the domain of biology, and I am an adherent with all my heart of the noble ideas advocated by M. Richet in the page which we quoted from him at the beginning of this paper, but we think that before searching for the explanation of miraculous phenomena it is proper to try to fathom this other unknown realm, "our ego," which is no less extensive and at the same time extremely impor-

tant, our mental life, our cerebration with all its forms and its intellectual and somatic modalities. This realm of the unknown is more important than any other, and psychologists, spiritualists, telepathists, occultists, and even physiologists would but advance the problems which they study, if they would devote more attention to them. There are many enigmas proposed to us by this sphynx, and many mysteries which she hides! Does not the sub-consciousness with its numerous combinations and its sensorial alimentation constitute the foundation of our being, our waking as well as our dormant thought? It is very fine to break through the beliefs of science, and to open new paths, and for my part I see no inconvenience in the existence of telæsthesia, for there are many other phenomena of a physical nature which may serve as an example. But it is necessary to prove it, and if we do not prove it we must not venture to hunt for comparisons among phenomena of a physical nature when we do not yet possess sufficient knowledge to know to what extent and in what order of ideas the psychical phenomena are comparable to them. We know at the most that there is a close relation between the two orders of ideas, but that is all. Before breaking through the cranial envelope of our brain and admitting that our thought flies in space in the form of a telepathic vibration and countenancing the belief that our thoughts can thus make their way to a distant goal, let us study incessantly this world of "ours," which is more important than any class of physical phenomena, and let us not become intoxicated with this new metaphysics which is characterised by its love for figures, for too great precision, and for mathematical calculations based upon unreliable data.

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